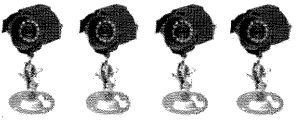
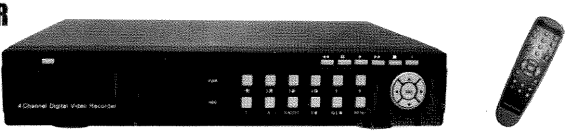
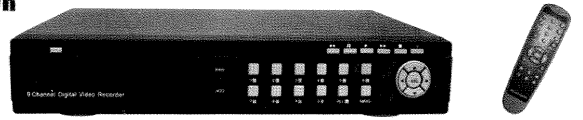
# User Manual



**4CH DVR**



**9CH DVR**



**Remarks: 9CH DVR Can Connect Maximum 9 Cameras**

# CONTENTS

**Chapter 1: DVR Features** ..... **1**
DVR Feature ..... 1
**Chapter 2: Overview** ..... **1**
2.1 Front Panel (All Modes) ..... 1
2.2 Rear Panel ..... 2
2.3 Remote Control ..... 3
**Chapter 3:Alarm Installation** ..... **3**
3.1 Alarm Installation ..... 3
**Chapter 4: DVR System Installation** ..... **4**
4.1 Install Hard Disk ..... 4
4.2 Connecting Camera and Monitor ..... 4
4.3 VGA Output (optional) ..... 4
4.4 Connecting Power Supply ..... 4
**Chapter 5: Starting the DVR** ..... **5**
5.1 Firmware Version ..... 5
5.2 Detecting Installed Hard Drive ..... 5
5.3 Format Hard Drive ..... 5
**Chapter 6: DVR Menu System** ..... **6**
6.1 Navigating the Menus ..... 6
6.2 Menu Overview ..... 6
6.3 Camera Setup ..... 7
6.4 Record Setup ..... 7
6.5 Record Frame rate ..... 7
6.6 Video Quality ..... 8
6.7 Record Schedule ..... 8
6.8 Sensor Setup ..... 8
6.9 H/W Sensor Setup ..... 9
6.10 Motion Detector Setup ..... 9
6.11 Hard Drive Setup ..... 10
6.12 Miscellaneous Setup - Change Password ..... 10
6.13 Miscellaneous Setup - Set Time ..... 11
6.14 Miscellaneous Setup - Hidden Channel ..... 11
6.15 Miscellaneous Setup - Audio Port Setup ..... 11
6.16 Miscellaneous Setup - PTZ Setup ..... 11
6.17 Miscellaneous Setup - Image Parameters ..... 12
6.18 Miscellaneous Setup - Password Enable ..... 12
6.19 Miscellaneous Setup - Keypad Tones ..... 13
6.20 Miscellaneous Setup – SEQ.DWELL TIME ..... 13
6.21 Miscellaneous Setup - VGA Setup ..... 13
6.22 Network Setup ..... 13
6.23 Language ..... 16
6.24 Reset Menu ..... 16
**Chapter 7: Record** ..... **17**
7.1 Start Recording ..... 17

7.2 Audio Recording ..... 17
7.3 Stop Recording ..... 17
7.4 Estimated Recording Length ..... 18
**Chapter 8: Playback ..... 18**
8.1 Playback Control ..... 18
**Chapter 9: USB Progamming (optional) ..... 19**
9.1Driver Installation: ..... 19
9.2 Program Interface ..... 19
9.3 Program Running ..... 20
**Chapter 10: Specification ..... 23**
10.1 4 / 9-Channel DVR ..... 23
10.2 Cameras ..... 23
**Chapter 11: Appendix ..... 24**
11.1 System connection diagram ..... 24
11.2 Accessories Included With DVR(4CH/9CH) ..... 24
**Chapter 12: Trouble Shooting Guide ..... 25**



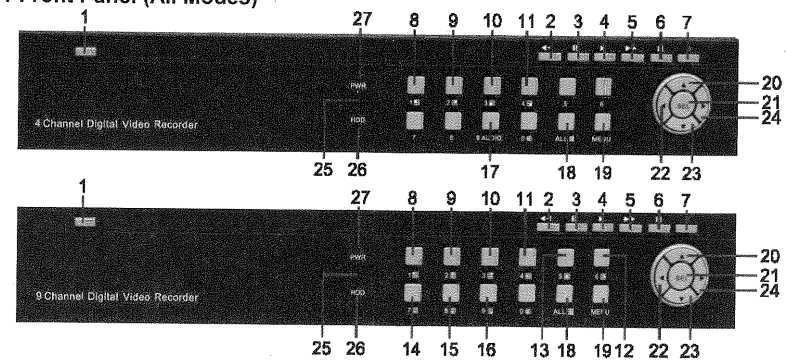
# Chapter 1: DVR Features

## DVR Feature

- MPEG4 compression
- **4-Channel:** 4 BNC Camera Input - 2 BNC Video Output
  **9-Channel:** 9 BNC Camera Input - 1 BNC Video Output
- **4-Channel:** 2 Audio Input - 2 Audio Output
  **9-Channel:** 1 Audio Input -1 Audio Output
- System Format : PAL
- Motion Detection with Sensitivity and Area Settings
- Time Schedule, Alarm and Motion Triggered Recording Modes
- Hard Disk Support up to 500GB
- Support PTZ Control via 485 Port
- View and Operate over Network (Broadband Connection Required)
- Built-in USB2.0 Port for Backup to Computer or
  USB Memory stick Backup (Optional)
- VGA Output (Optional)

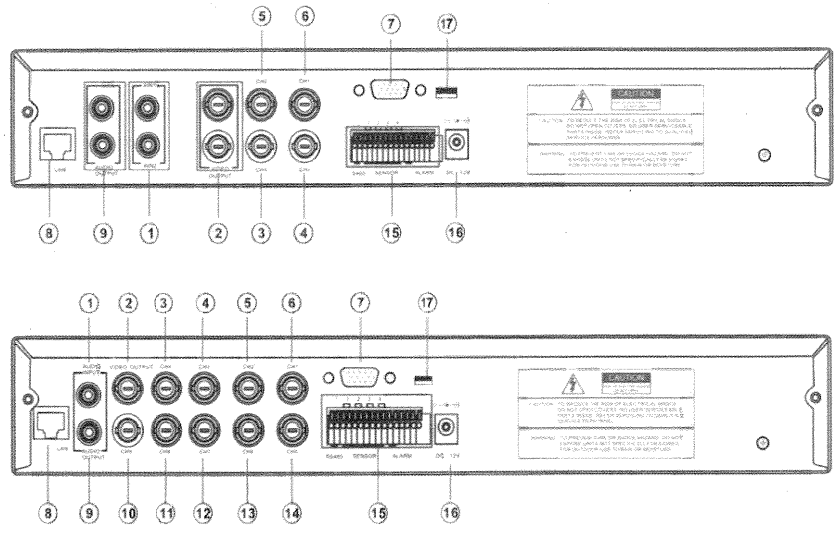
# Chapter 2: Overview

## 2.1 Front Panel (All Modes)




1. Power switch
2. Rewind
3. Pause
4. Rewind
5. Fast Forward
6. Stop
7. Record
8. CH1
9. CH2
10. CH3
11. CH4
12-16. CH5- CH9
(9 Ch DVR Only)
17. Mute Audio
18. Display All Cameras
19. Menu:Exit Menu
20. Up Arrow
21. SEL: Select
22. Lift Arrow
23. Down Arrow
24. Right Arrow
25. IR receiver
26. HDD Indicator
27. Power Indicator

## 2.2 Rear Panel



1. Audio Input
2. Video output
3. CH4
4. CH2
5. CH2
6. CH1
7. VGA output
8. LAN
9. Audio output
10. CH9
11. CH8
12. CH7
13. CH6
14. CH5
15. RS485/Sensor input/Alarm ouput
16. DC Power Input Jack
17. USB Prot





## 2.3 Remote Control

| | |
|---|---|
| 1-9 | Channel Select 1-9 |
| 0 | Number |
| ALL | Display all Channels |
| Menu | Enter or Exit Menu |
| ▲ | Move Up/Left |
| ▼ | Move Down/Right |
| SEL | Select /Modify Item |
| ◄◄ | Rewind |
| ► | Play Recording |
| ►► | Fast Forward |
| ● | Record |
| ❚❚ | Pause |
| ■ | Stop Recording/Playback |
| Audio | Audio Input/Output |
| Mute | Mute Audio |

# Chapter 3:Alarm Installation

## 3.1 Alarm Installation

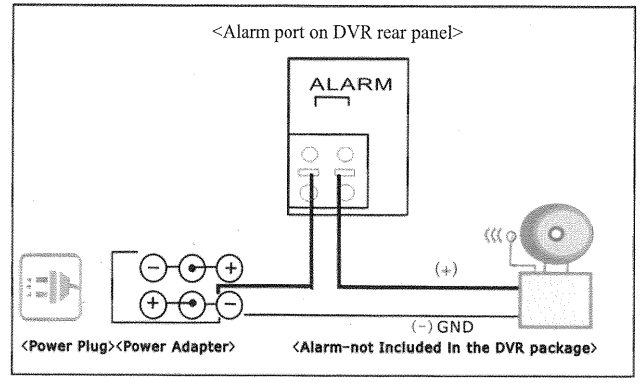
The DVR has an internal switch for sounding an alarm. The switch is normally open, but when the sensor is triggered, the alarm is activated as well. The circuitry is as follows.

[NOTE] Contact an authorized dealer for information about buying the appropriate alarm and proper installation procedures as per your need. There are two steps for alarm installation.

(a) Connect the alarm power lines to the alarm switch terminal.

(b) Connect the alarm power lines to the appropriate power source.

The following diagram shows how to install alarm device into your DVR.



# Chapter 4: DVR System Installation

## 4.1 Install Hard Disk

**NOTICE: Don't take out HDD when DVR is running.**

**If your product come with a removable HDD drawer(optional), please refer below:**

(1)Take out the hard drive drawer from the DVR side panel, Connect the power and data bus to SATA hard disk;

(2)Push the hard drive drawer back into the DVR (Make sure the drawer is firmly inserted to the DVR) and them lock the hard drive drawer.

**If your product does not come with a removable HDD drawer, please refer below:**

(1) Remove the screws around the top cover;

(2) Remove the top cover carefully;

(3) Connect the power cord and data cable to hard disk carefully;

(4) Use the provided screws to fix hard disk on the rack inside and then replace the top cover of the case.

## 4.2 Connecting Camera and Monitor

There are 4/9 camera input and 2/1 Monitor output with BNC connectors (Refer to 2.2 Rear Panel).

## 4.3 VGA Output (optional)

There is 1 CRT or LCD monitor output with VGA port.

## 4.4 Connecting Power Supply

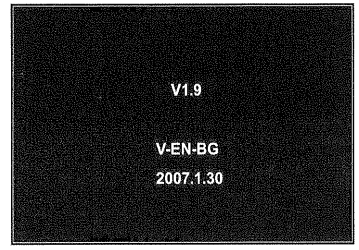
Please only use the power adapter supplied with the DVR.





# Chapter 5: Starting the DVR

## 5.1 Firmware Version




After connecting the power adapter and turning on the power button, the system will boot-up and display the version and released date of the DVR firmware.

## 5.2 Detecting Installed Hard Drive

DVR will detect the installed hard drive and display the hard drive information.

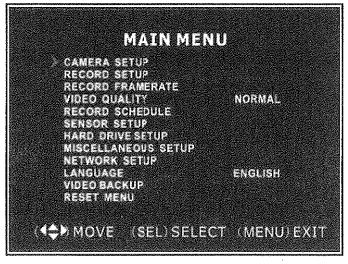
## 5.3 Format Hard Drive

When the hard drive is installed in the DVR for the first time the DVR will request you to format the HDD, Otherwise the DVR will not be able to record to the HDD.

Press [**SEL**] to format or press [**MENU**] to cancel.

# Chapter 6: DVR Menu System

## 6.1 Navigating the Menus




Press [MENU] to enter main menu.

Use [▲UP] and [▼DOWN] to select items.

Press [SEL] to modify setting and [MENU] to return to previous or exit.

## 6.2 Menu Overview

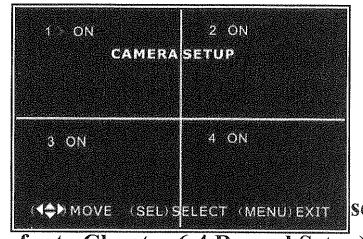
**Menu Directory**

- **Main Menu**
  - **Camera Setup**
  - **Record Setup**
  - **Record Frame rate**
  - **Video Quality**
  - **Record Schedule**
  - **Sensor Setup**
  - **Hard Drive Setup**
  - **Miscellaneous Setup**
    - Change Password
    - Set Time
    - Hidden Channel
    - Audio Port Setup
    - PTZ Setup
    - Image Parameters
    - Password Enable
    - Keypad Tones
    - SEQ.DWELL TIME
    - VGA Setup
  - **Network Setup**
  - **Language**
  - **Video Backup (optional)**
  - **Reset Menu**





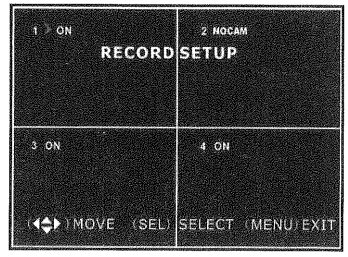
## 6.3 Camera Setup




Camera Setup allows you to turn cameras on or off.

Press [▲, ▼, ◄ and ►] button to select a channel and then press [**SEL**] to modify the setting to **ON** or **OFF**. **If a channel is set to OFF, DVR will not record(Details please refer to Chapter 6.4 Record Setup)**

## 6.4 Record Setup

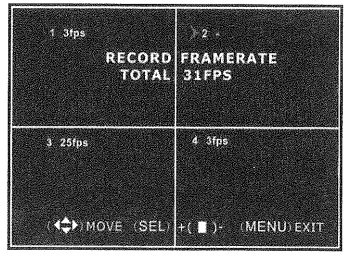



Record Setup allows you to set up recording channels.

Press [▲, ▼, ◄ and ►] button to select a channel, and then press [**SEL**] to modify the setting to **ON** or **OFF**.

If a channel is disabled on Camera Setup mode, it will not record and the DVR will display "NOCAM" on screen.

## 6.5 Record Frame rate

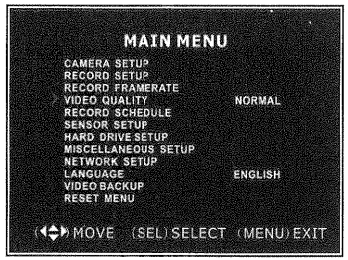



The total frame rate is 50fps . You can set the frame rate for the channel which you selected to record. If the sum of the frame rate you select for all cameras is more than 50fps, the DVR will automatically adjust the largest frame rate value to a smaller value.

Press [▲, ▼, ◄ or ►] button to select a channel, and then press [**SEL**] to increase the value or press [■STOP] to reduce the value.

Note: Higher frame rate shows smooth images but requires more hard drive space.

## 6.6 Video Quality



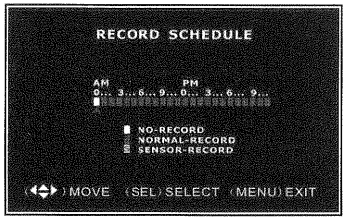

Video Quality has 4 different settings: **Highest, High, Normal and Low**.

The higher the video setting, the better quality images, however higher quality images require more hard drive space.

Press [**SEL**] to change the quality setting.

## 6.7 Record Schedule

Setting the Record Schedule allows you to customize the type of recording depending on the time of day.




The time line indicates 24 hours of a day based on AM/PM (0 = 12).

Press [▲, ▼, ◄ or ►] button to select a time point, press [**SEL**] to modify the recording mode.

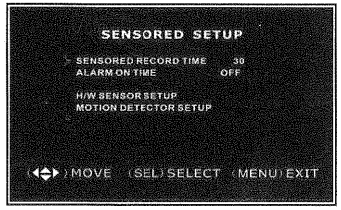
**NO-RECORD** [□white]: DVR will not record during the time.

**NORMAL-RECORD** [■red]: DVR will record continuously.

**SENSOR-RECORD [S]: DVR will record when sensor or motion is triggered.**

**NOTE:** In order to activate the record schedule press the [●] record button when viewing the cameras. After pressing the [●] record button if schedule is set to "NORMAL-RECORD" the DVR will start to record immediately; if the schedule is set to be "SENSOR-RECORD" the DVR will not start recording until a motion is detected by the DVR or an installed sensor is triggered.

## 6.8 Sensor Setup




Sensor Record Time indicates how long the recording time is when the motion or sensor is triggered.

Alarm On Time indicates whether the buzzer will sound when motion is detected.





**SENSORED RECORD TIME**:The number (5,10,15,20,25,30) indicates how many seconds the motion detection or sensor triggered recording lasts after motion or sensor triggering stop.

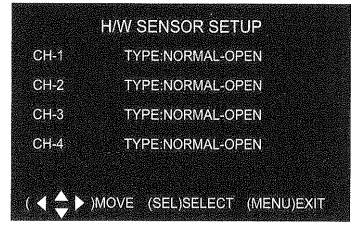
**ALARM ON TIME:** This selection indicates how many seconds the buzzer inside the DVR or extension alarm sounds after motion or sensor triggering stop.

**CONT:** Continuous alarm until any key is pressed..

**OFF:** No alarm

## 6.9 H/W Sensor Setup

**Note:** Sensors and extension alarm are not included with the DVR system and may be purchased separately.




**HARDWARE SENSOR SETUP:**

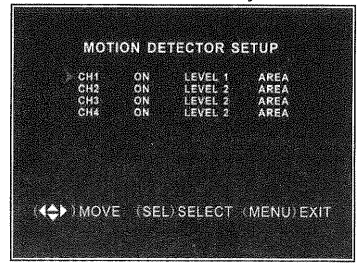
There are 3 different modes for sensor setting: NOT INSTALLED, NORMAL-CLOSE and NORMAL-OPEN. Consult the alarm purchased for more details on which setting is required.

**Note:** For 4CH DVR, there are 4CH Input of the Sensor;

For 9CH DVR, there are 8CH Input of the Sensor.

## 6.10 Motion Detector Setup

This section allows you to set up motion detection options for each camera.

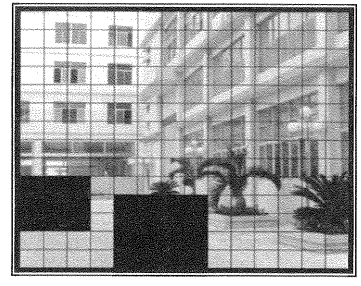

MOTION DETECTOR SETUP
CH1 ON LEVEL 1 AREA
CH2 ON LEVEL 2 AREA
CH3 ON LEVEL 2 AREA
CH4 ON LEVEL 2 AREA
MOVE (SEL) SELECT (MENU) EXIT

**MOTION DETECTOR SETUP:**

ON/OFF: Enable or disable motion detection recording.

LEVEL: Sensitivity for motion detection. There are 3 levels sensitivity: Level 1-low, Level 2-Normal, 3-highest

**AREA:** Select detectable area on the screen.

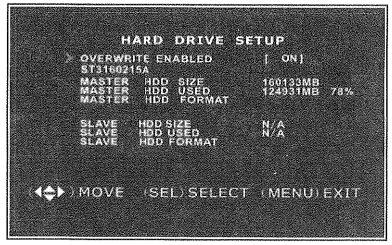


**Area Selection:**

Press [▲, ▼, ◄ or ►] button to select a block, and press [**SEL**] button to set the block to detect motion. The area is detectable when it is clear, the area is not detectable when it is covert by shadow.

## 6.11 Hard Drive Setup

This section will display the current hard drive status and usage options


HARD DRIVE SETUP
OVERWRITE ENABLED [ ON ]
ST3160215A
MASTER HDD SIZE 160133MB
MASTER HDD USED 124931MB 78%
MASTER HDD FORMAT
SLAVE HDD SIZE N/A
SLAVE HDD USED N/A
SLAVE HDD FORMAT
( ◆◆ ) MOVE (SEL) SELECT (MENU) EXIT

**OVERWRITE ENABLED:**

**ON:** overwrite oldest video when hard drive is full.

**OFF:** stop recording when hard drive is full.

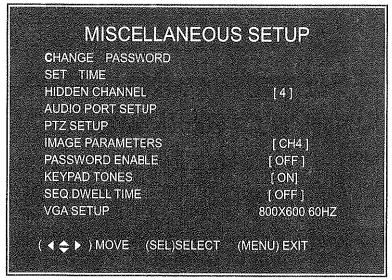
**HDD SIZE:** indicates the total capacity of the hard drive installed in the DVR.

**HDD USED**: indicates the space used in the hard disk drive for recording and the percent used.

**HDD FORMAT:** will erase all video and data on the installed hard drive and make it readable by the DVR

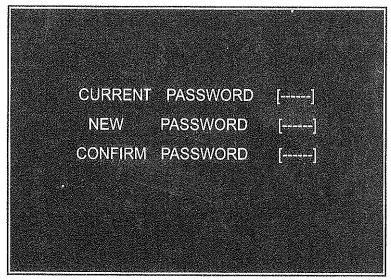
**Note:** You will be prompted for the password when formatting a hard drive. The default password is "111111"

## 6.12 Miscellaneous Setup - Change Password




This option allows you to change the system password. The password must be composed with six characters.

All keys can be used as password key except the [MENU] key, which is used to exit.



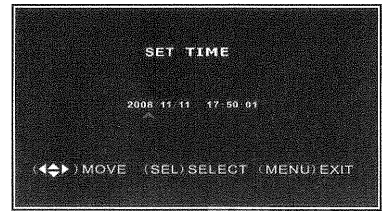

Enter the current password first, and then enter six characters as your new password, repeat the new password to confirm.

If you forget your password, please contact technical support for assistance.





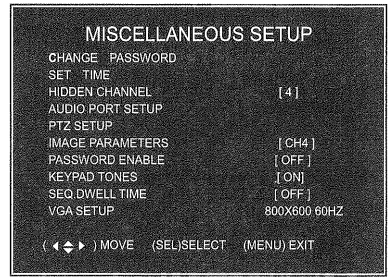
## 6.13 Miscellaneous Setup - Set Time




The system date and time format is YYYY/MM/DD and HH:MM: SS.

Press [◀] or [▶] button to select the data to modify, press [SEL] to modify. Press [MENU] to save and return to previous menu.

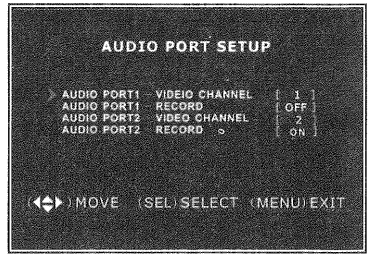
## 6.14 Miscellaneous Setup - Hidden Channel




The system provides a function to hide a channel in monitoring mode. The selected channel can still be recorded while it's hidden; the hidden picture is viewable during playing back.

Press [SEL] to select a channel to hide.

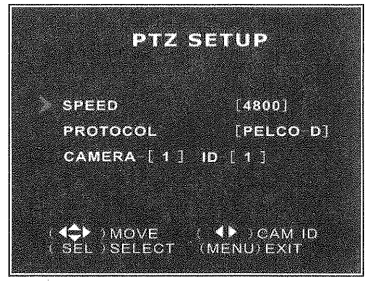
## 6.15 Miscellaneous Setup - Audio Port Setup


AUDIO PORT SETUP
AUDIO PORT1 VIDEO CHANNEL [ 1 ]
AUDIO PORT1 RECORD [ OFF ]
AUDIO PORT2 VIDEO CHANNEL [ 2 ]
AUDIO PORT2 RECORD [ ON ]
( ◆◆ ) MOVE (SEL) SELECT (MENU) EXIT

You can select the audio recording function to **ON** or **OFF**, and select the video channel that you like to record the audio on.

**Note:** For 4CH DVR, there are 2 Audio inputs;
For 9CH DVR, there are only 1 Audio input.

## 6.16 Miscellaneous Setup - PTZ Setup




SPEED: Set the baud rate (4800, 9600, 19200, 38400) to match with your speed dome.

PROTOCOL: Supports "PELCO-D" and "PELCO-P". Select the protocol according to your speed dome's protocol.

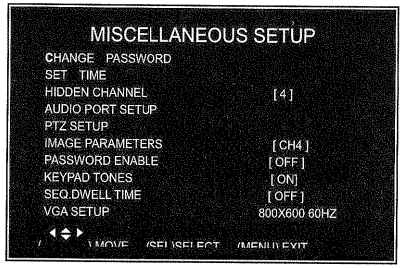
CAMERA: select the camera channel which is connected with the speed dome.

ID: Assign an ID to your speed dome.

Press [**SEL**] to select the camera, press [◄] or [►] button to assign the ID.

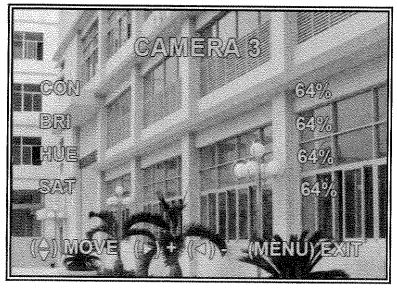
On Single Channel display mode, press [SEL] button to enter into PTZ Control mode, and [◄◄]、[►►] button to proceed PTZ control.

## 6.17 Miscellaneous Setup - Image Parameters




You can adjust the image parameters according to your needs.

Move the cursor to this selection and press [◄] or [►] button to select a channel you want to adjust, then press [**SEL**] button to edit parameters.




**CON:** Contrast

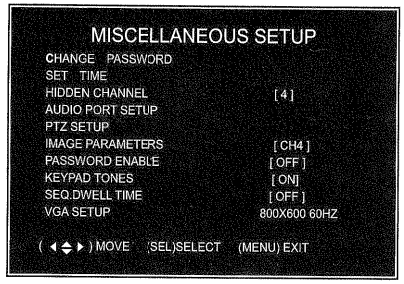
**BRI:** Brightness

**HUE:** Hue

**SAT:** Saturation

Press [▲] or [▼] to select the item, and [**SEL**] button to adjust the value.

## 6.18 Miscellaneous Setup - Pas

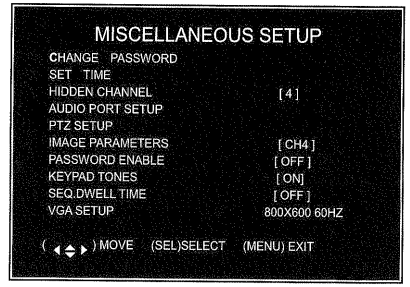



The password will be required to control the DVR when this option is set to **"ON"**, and the password is not required when this option is set to **"OFF"**.



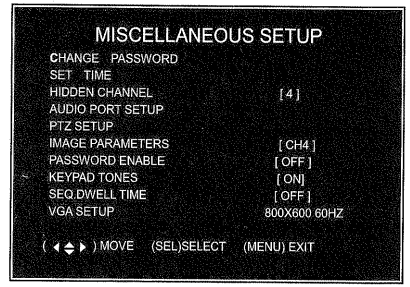


## 6.19 Miscellaneous Setup - Keypad Tones




This function allows you to enable /disable buzzer sound when pressing a button. Press [**SEL**] to select **ON** or **OFF**.

## 6.20 Miscellaneous Setup – SEQ.DWELL TIME

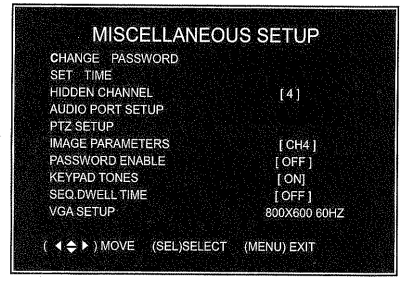



Press [◄◄]、[►►] ([SEL])button or Select "on" / "off", or select Seq. Dwell time to proceed the setting.
Remark: Seq. Dwell Time Option. Should be OFF、 1s、5s、10s、15s、30s、60s etc.

**Note:** On working mode press [ ▌▌] button.

to directly proceed the Seq. Swell Time function

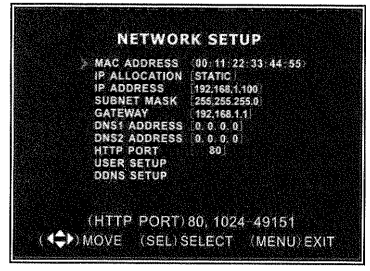
## 6.21 Miscellaneous Setup - VGA Setup




Select a VGA resolution to match with your CRT or LCD monitor.

**NOTE:** VGA video output is an optional function and may not be available on all models

## 6.22 Network Setup

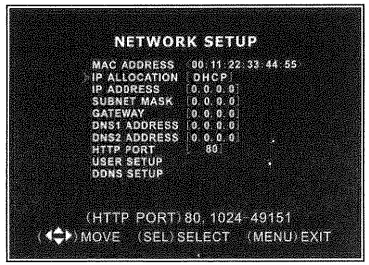



Network Setup allows you to prepare the DVR for viewing over the internet or local network

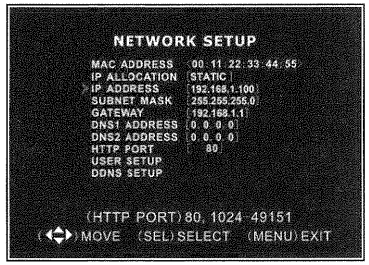
MAC ADDRESS: In a local area network(LAN), the MAC (Media Access Control) address is your computer's unique

hardware identity code.(On an Ethernet LAN, it is the same as your Ethernet address.)When you are connected to the Internet from your computer (or host as the Internet protocol thinks of it ), a corresponding table relates your IP address to your computer's physical (MAC) address on the LAN.

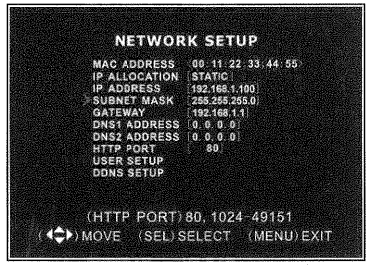
**IMPORTANT:** This setting should only be changed if multiple DVRs are being setup on the same network and the first code "00" must not to be changed.



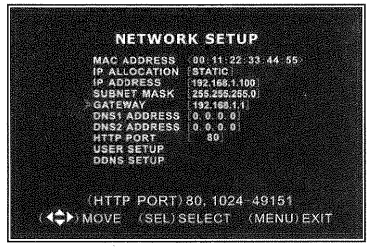

**IP ALLOCATION:** DVR supports DHCP and Static IP modes. If your modem/router supports DHCP mode use DHCP. When using STATIC mode, you will be required to setup your internet settings manually.
Note: After setting the DVR to DHCP mode restart the unit.




**IP Address:** In a local network, the IP address is a unique designated address for your DVR recognized by your router. Ensure this number is within the range usable by your modem/router. Use the UP "▲"and DOWN "▼" buttons to move the cursor and use the "SELECT" button to change the numbers. Once you have finished the changes restart your DVR.




**SUBNET MASK**: Subnet Mask is used to determine what subnet an IP address belongs to. A number that is used to identify a sub network so that IP addresses can be recognized on a local area network. Consult your modem/router for your LAN's subnet mask.



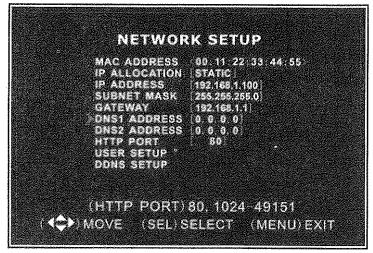

**GATEWAY:** Set this number to the gateway set by your modem/router.

**NOTE:** To adjust the IP ADDRESS, SUBNET MASK and GATEWAY value,

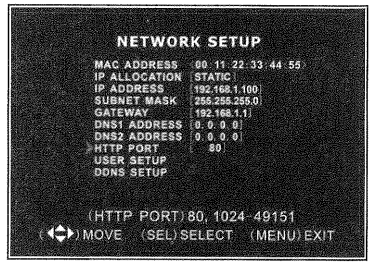




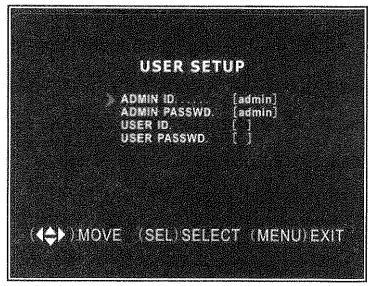
only when the [STATIC] mode is being selected.



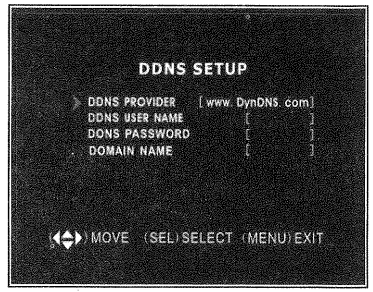

**DNS ADDRESS:** This code should be provided by your local ISP.




**HTTP PORT:** This port number is used to communicate with PC Client. The default value is 80.




**USER SETUP:** When accessing the DVR from a remote location you will be prompted for a login and password. The default is "admin" for full administrator rights. Set "User ID" and password to setup a user with limited rights to prevent tampering.

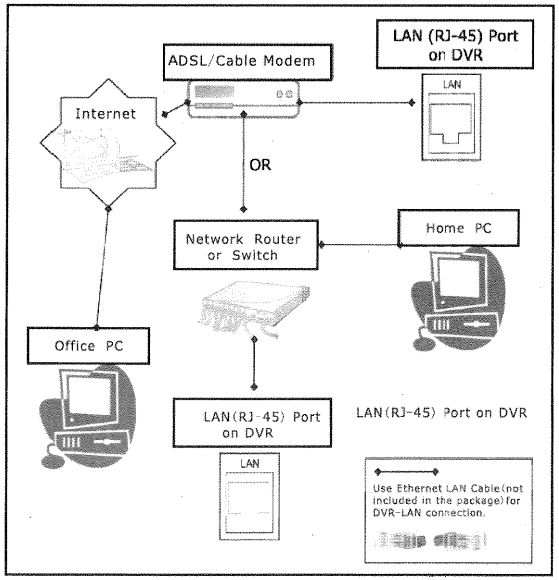



**DDNS SETUP**: If you require an external service to maintain a dynamic IP address enter the user information here.

LAN-DVR Connection

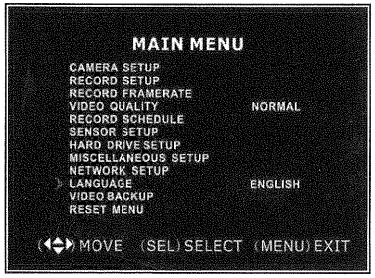
See the diagram below for steps to connect your DVR to a local area network or the internet. For remote monitoring from your computer, you must have a LAN

connection available or broadband Internet access.




You need to register a www.dyndns.org to get a free account .After registration, you will have a username and password. You can also register your domain name on the website. Please refer to Chapter 5, P. Network Setup for more details. There you will learn how to input the DynDns username, password, and domain name. You can log in from anywhere by using Internet Explorer and entering your DVR's domain name.

## 6.23 Language




You can change the OSD language from the default English to German, French, Italian, Spanish or Portuguese.

This is only available for the DVR comes with optional feature.

## 6.24 Reset Menu

If you select this item, the system will restore all your settings to factory default values. You need to enter your password to reset the menu.





# Chapter 7: Record

## 7.1 Start Recording

Press [●] record button to start recording according to the record schedule you have set. System will display some information on screen.

[●]: the red pot next to the channel name indicates that the channel is being recorded.

[**A-REC**]: indicates the current record schedule is set to NORMAL-RECORD mode.

[**S-REC**]: indicates the current record schedule is set to SENSOR-RECORD mode.

[**N-REC**]: indicates the current record schedule is set to NO-RECORD mode.

[**39%**]: indicates the percentage of hard disk space used.

[M]: HDD info ([M] Master Hard Disk)

## 7.2 Audio Recording

[🔊]: indicates this video channel is bundled with an audio port, and the audio output is on.

[🔇]: indicates the audio output is off.

[🔊]: indicates the audio is being recorded and the audio output is on.

You could press [0] button on front panel to be mute mode for audio output. The audio input can be still recorded while the output is mute.

## 7.3 Stop Recording

Press [■] stop button will stop recording. If password protection function is enabled, system will prompt you to input password. Only correct password can stop

recording process.

## 7.4 Estimated Recording Length

**Estimated record time based on 160GB HDD**

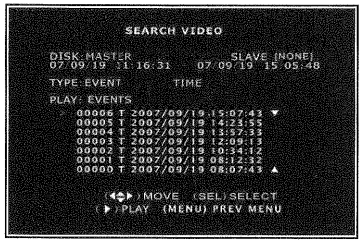
| Standard | Quality | 50fps | 36fps | 24fps | 12fps | 1fps |
|---|---|---|---|---|---|---|
| PAL | Highest | 64 | 89 | 133 | 267 | 3200 |
| | High | 90 | 125 | 188 | 375 | 4500 |
| | Normal | 110 | 153 | 229 | 458 | 5500 |
| | Lower | 123 | 171 | 256 | 513 | 6150 |

Unit: Hour

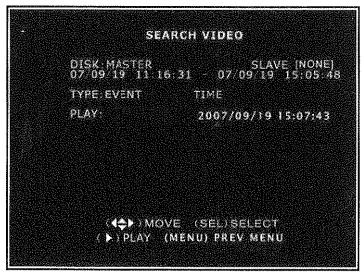
# Chapter 8: Playback

## 8.1 Playback Control

Press the [▶] button to enter into PLAYBACK mode. The newest record event will be played.




Press the [MENU] button on PLAYBACK mode, then the system will list all the recorded events. The latest record will be on top of the list. Press the [▲UP] or [▼DOWN] buttons to select the start time and then press [▶] to play the event.



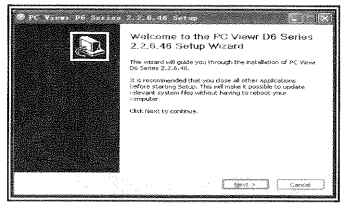

Another way to search video is directly input time period. Press the [MENU] button and then use [◀] or [▶] button to select the TIME search mode. Use [**SEL**] button to edit time value, press [▶] to play the video. If the time you selected has no record event, it will indicates "NO EVENTS" on the screen when you press [▶] play





# Chapter 9: USB Progamming (optional)

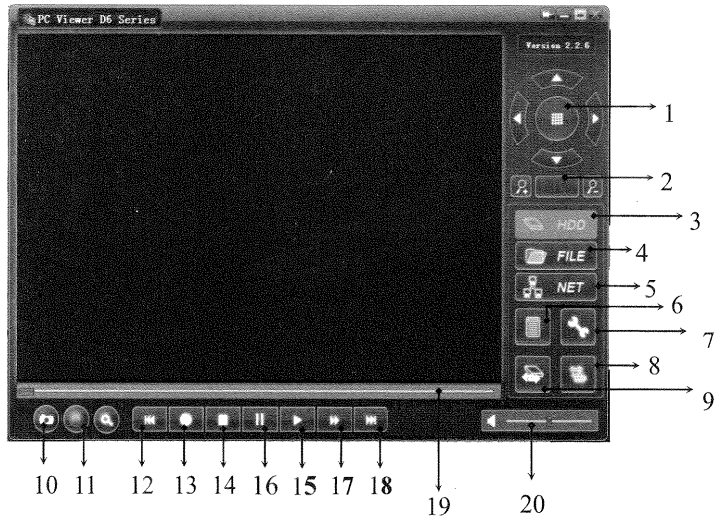
## 9.1Driver Installation:




(1) Insert driver CD to your CD-ROM Drive.
(2) Open CD directory.
(3) Double click on the install applications.
(4) Run "Install" program.
(5) Follow-up the setup wizard to finish the installation.

## 9.2 Program Interface

**Button functions:**




| | |
|---|---|
| 1.PTZ Control | 11.Convert Streams to AVI file |
| 2.Zoom in, Zoom Out | 12.Back one frame |
| 3.HDD Play Mode | 13. Record |
| 4.File Play Mode | 14.stop |
| 5.Net Play Mode | 15.Play |
| 6.Event List | 16.pause |
| 7.Control Panel | 17.fast forward |
| 8. Remote DVR Control | 18.forward one frame |
| 9.Change Storage Device | 19.Playback Slider |
| 10.Capture Image | 20.Audio Slider |

## 9.3 Program Running

**HDD play mode:**

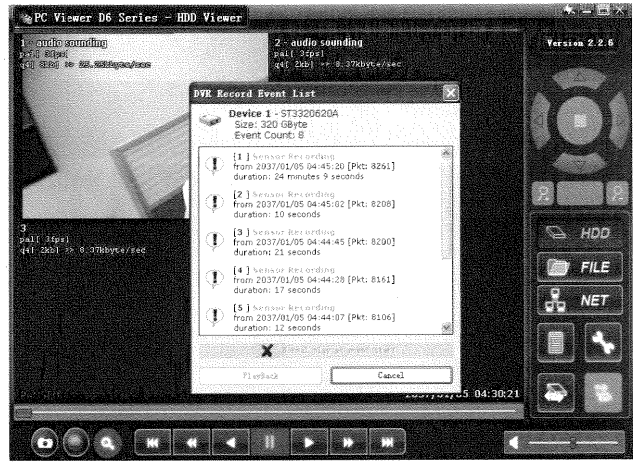
System will detect the HDD automatically when you connect the USB cable to your PC.

An USB icon" " will appear in the system tray (right bottom corner of the screen).

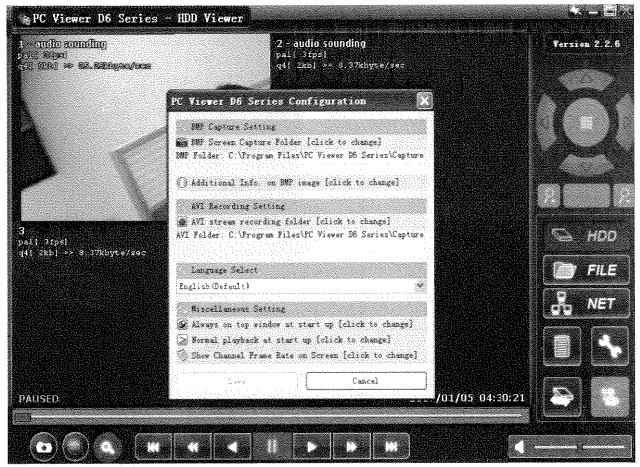
Then you could double click " " icon on your desktop to run the program.

**Note: if you do not follow above steps, the program will fail to detect HDD**

Press to open the video event lists.



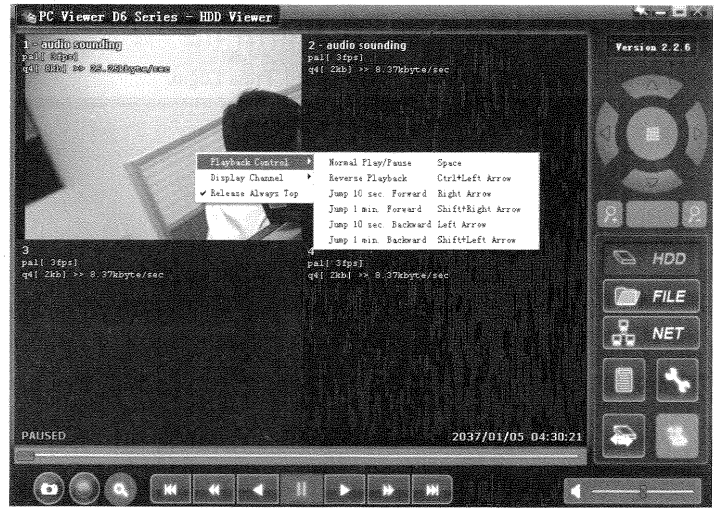

Press to **configure the program local setting**







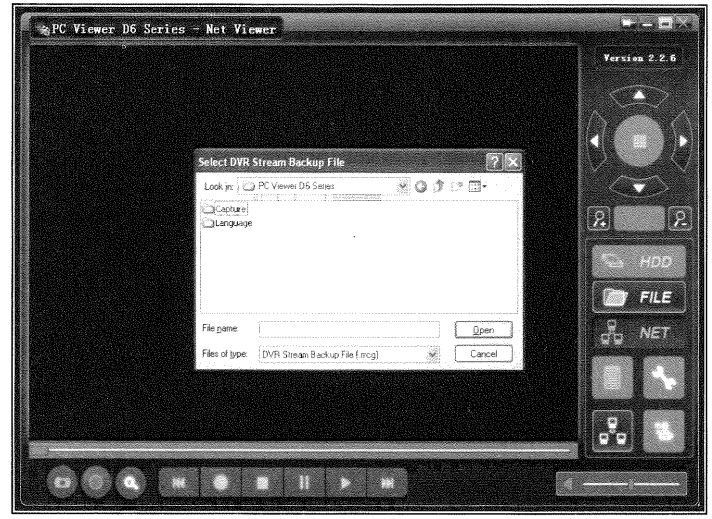

Press to play video.




**FILE play mode: (only when you plug a USB Memory Stick into your PC)**

Press " " to open a folder and select the file you want play.

Double click the file.

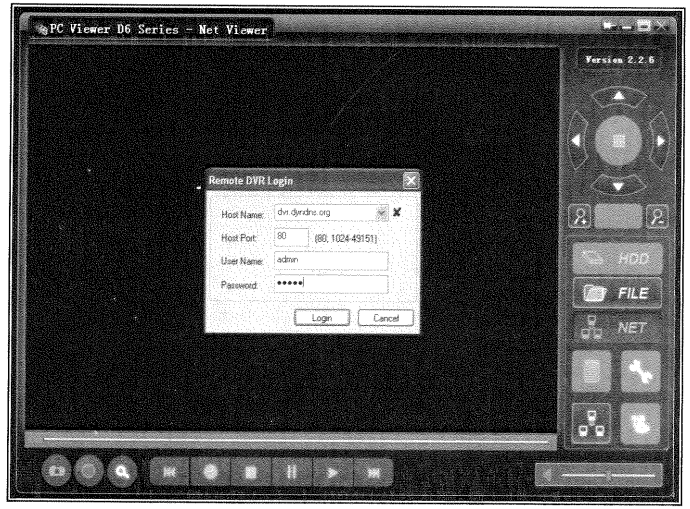


**NET play mode:**

This mode allows you to remote control your DVR via Internet.

Press "NET" to pop up the login window.

Fill in Host Name, Host Port, User Name and Password. Press Login.








# Chapter 10: Specification

## 10.1 4 / 9-Channel DVR

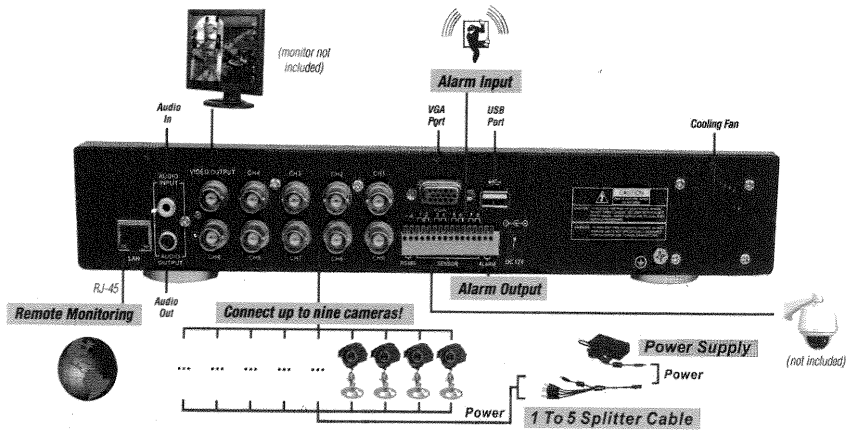
| Items | Descriptions | |
|---|---|---|
| Video Standard | PAL | |
| Video Input/Output | 4 Channels/2 Channels，9 Channels/1 Channel | |
| Audio Input/Output | 2 Channels/2 Channels，1 Channel/1 Channel | |
| Monitoring | Resolution | PAL:720X576@25fps(Each Ch) |
| | Features | Full-D1，1-CH/4-CH/9-CH Display |
| Recording | Resolution | PAL:720X228@50fps(4/9Ch.Total) |
| | Features | Variable Frame Rate/Variable QL per |
| | Quality | 4-Level(Highest, High, Normal, low) |
| Audio | ADPCM2 CODEC | |
| Video | MPEG4 | |
| Motion Detection | Settable Window/Level | |
| Microprocessor | 32-bit RISC Processor | |
| Network Interface | TCP/IP(RJ45) | |
| Network Monitor | IE(Internet Explorer) | |
| PTZ Interface | RS485 | |
| USB Interface | USB2.0 | |
| VGA Output | Optional | |
| Remote control | IR remote control | |

## 10.2 Cameras

Image Sensor: 1/4" Sony Colour CCD
LED: 12 Infrared LEDs
Resolution: 420 TV lines
Minimum luminance: 0.8Lux/F1.2
Signal System: PAL
Lens: 3.6/6mm
Power Supply: DC12V
Dimensions:68(w)x68(d)x92(h)mm
Operation Temperaure: -20C~+50C
Auto Gain Control: On/Off
Video Ouput: 1.0Vp-p 75Ω
Electronic Shutter: 1/50(1/60)-1/100,000Sec
S/N ratio: >48dB

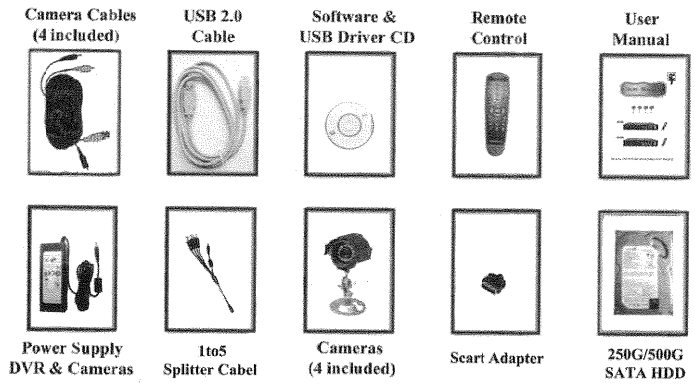
# Chapter 11: Appendix

## 11.1 System connection diagram




## 11.2 Accessories Included With DVR(4CH/9CH)

1. 4-18m Cables
2. 1-USB 2.0 Cable
3. 1-CD
4. 1-Remote Control
5. 1-User Manual
6. 1-Power Supply
7. 1-1-5 Splitter Cabel
8. 4-Sony CCD Cameras
9. 1-Scart Adapter
10. 1-250G/500G SATA HDD








# Chapter 12: Trouble Shooting Guide

**1. What kind of camera should I buy for this DVR?**
Any BNC or RCA interface indoor/outdoor/infrared camera will work with the DVR. It doesn't matter the color of the camera. However, web cameras that require a USB interface are not compatible with the DVR.

**2. What kind of sensor device should I buy for sensor recording?**
Any motion detection sensor is compatible with our DVR.

**3. What kind of alarm device should I buy for DVR?**
Most sound alarms are compatible with our DVR.

**4. I can't turn on the DVR.**
Make sure that the power switch is on. If the power switch is on and you still can't turn on DVR, make sure that the power cord is plugged in correctly and the green power light on DVR front panel is on.

**5. I see nothing but a blue screen after I turn on the DVR.**
Check the camera input and video output connection on DVR rear panel. If you can't find any problem with these connections, check whether the camera power cable is firmly connected.

**6. I pushed the MENU button but it doesn't show the menu directory.**
When the DVR is in record mode no button on the front panel will work. You will see the yellow light on the front panel when DVR is recording. To end recording press the STOP button.

**7. I push the Record button but nothing records.**
Make sure the "Record Schedule" menu shows that the current time is marked by a "red block" not a "white block".

**8. I turn on the DVR and no buttons work.**
Make sure hard drive jumper is set as a "master". Check the two connectors (power cable & IDE cable) from hard drive to DVR to see if they are firmly connected.

**9. I installed only one camera to channel 1 but channel 1 screen does not show anything.**
Under Menu and Camera Select, select 1.

**10. Can I record everything 24 hours 7 days a week without stopping?**
Yes. On Record Schedule on the Menu, select "Red Block" for 0-24 periods.

**11. Can I prevent other people from stopping the recording while I am gone? Would creating a password do it?**
Enable the password control function in miscellaneous setup submenu to prevent illegal operation.

**12. Can I still record all the events while I review the previous recording?**
No. This DVR currently doesn't support recording while playback.

**13. What is the correct jumper setting for using a single hard drive?**
Single master without slave. Most of HDD drives come with the jumper setting as a Master without slave, so you may not need to change the jumper setting after you Purchase HDD and install it into DVR. Check the documentation that came with your hard drive.

**14. What is the largest hard drive that I can install in the DVR?**

This unit supports a SATA hard drive up to 500GB

**15. How can I erase all data on the hard disk drive?**

Select "HDD Format" option on the menu.

**16. Why do I need a password?**

You may need a password to format hard drive. The password is for your protection.

**17. Can my desktop PC read the video data on hard disk drive in DVR?**

Yes, MS-Windows can detect HDD but cannot recognize the file system. You must use a PC application (i.e. PC Viewer) to view the video image.

**18. What happens if I install my PC hard disk drive into the DVR?**

You can use a PC hard disk drive in the DVR. However, once it runs in DVR, it will delete Any PC operation system and files on the hard drive.

**19. What kind of hard drive should I purchase to make the DVR run?**

Any PC compatible SATA hard disk drive will work.

**20. Does this DVR kit come with sensors, cameras, or hard disk drive?**

Some models come with a hard disk drive and cameras. Some models don't. please check the package contents information on the DVR box. If the DVR unit that you've purchased contains a digital video recording system only, then you need to buy accessories separately to complete a digital video recording surveillance system. A single hard drive and a single camera are minimum requirements to make a digital surveillance system complete.